

## WHAT IS CLAIMED IS:

1. A golf club head comprising:  
a golf club head body made of metal and including a striking plate;  
at least one recession defined in the golf club head body; and  
5 at least one composite plate engaged in said at least one recession to form a portion of a shell of a golf club head product, said at least one composite plate including at least one metal layer and at least one non-metal layer that are laminated by pressing.
2. The golf club head as claimed in claim 1, wherein said at least one  
10 non-metal layer is an outermost layer of said at least one composite plate.
3. The golf club head as claimed in claim 1, wherein said at least one metal layer is an outermost layer of said at least one composite plate.
4. The golf club head as claimed in claim 1, wherein said at least one metal layer has a density smaller than  $4.8 \text{ g/cm}^3$  and is made of one of a light  
15 metal and an alloy.
5. The golf club head as claimed in claim 1, wherein said at least one composite plate includes in sequence a first non-metal layer, a metal layer, a second non-metal layer, and a third non-metal layer.
6. The golf club head as claimed in claim 5, wherein the first non-  
20 metal layer is one of a uni-direction fabric, a plainwoven fabric, and a twilled fabric made of graphite, wherein the second non-metal layer is an adhesive layer of one of solvent-release type, pressure-sensitive type, heat-sensitive

type, chemically-reactive type, and epoxy, and wherein the third non-metal layer is a single layer of impregnated graphite fabric.

7. The golf club head as claimed in claim 1, wherein said at least one composite plate includes in sequence a metal layer, a first non-metal layer,  
5 and a second non-metal layer.

8. The golf club head as claimed in claim 7, wherein the first non-metal layer is an adhesive layer of one of solvent-release type, pressure-sensitive type, heat-sensitive type, chemically-reactive type, and epoxy, and wherein the second non-metal layer is a single layer of impregnated graphite  
10 fabric.

9. The golf club head as claimed in claim 1, wherein said at least one composite plate includes in sequence a composite layer, a metal layer, a first non-metal layer, and a second non-metal layer.

10. The golf club head as claimed in claim 9, wherein the composite  
15 layer is a net formed by means of mix-weaving metal filaments and non-metal fibers, the metal filaments and the non-metal fibers being selected from the group consisting of graphite, Kevlar fibers, and titanium filaments, the first non-metal layer being an adhesive layer of one of solvent-release type, pressure-sensitive type, heat-sensitive type, chemically-reactive type, and  
20 epoxy, and the second non-metal layer being a single layer of impregnated graphite fabric.

11. The golf club head as claimed in claim 1, wherein said at least one

recession is defined in one of a crown portion, a sole portion, and a side portion of the golf club head body.

12. The golf club head as claimed in claim 1, further including a buffering space defined between an inner periphery of said at least one  
5 recession and an outer periphery of said at least one composite plate, and a filler being filled in the buffering space.

13. A composite plate for a golf club head, the composite plate comprising:

at least one metal layer; and

10 at least one non-metal layer, said at least one metal layer and said at least one non-metal layer being laminated by pressing to form the composite plate, the composite plate being adapted to be engaged in a recession of a golf club head to form a portion of a shell of the golf club head.

14. The composite plate as claimed in claim 13, wherein said at least  
15 one non-metal layer is an outermost layer of the composite plate.

15. The composite plate as claimed in claim 13, wherein said at least one metal layer is an outermost layer of the composite plate.

16. The composite plate as claimed in claim 13, wherein said at least one metal layer has a density smaller than  $4.8 \text{ g/cm}^3$  and is made of one of a  
20 light metal and an alloy

17. The composite plate as claimed in claim 13, wherein the composite plate includes in sequence a first non-metal layer, a metal layer, a

second non-metal layer, and a third non-metal layer.

18. The composite plate as claimed in claim 17, wherein the first non-metal layer is one of a uni-direction fabric, a plainwoven fabric, and a twilled fabric made of graphite, wherein the second non-metal layer is an  
5 adhesive layer of one of solvent-release type, pressure-sensitive type, heat-sensitive type, chemically-reactive type, and epoxy, and wherein the third non-metal layer is a single layer of impregnated graphite fabric.

19. The composite plate as claimed in claim 13, wherein the composite plate includes in sequence a metal layer, a first non-metal layer,  
10 and a second non-metal layer.

20. The composite plate as claimed in claim 19, wherein the first non-metal layer is an adhesive layer of one of solvent-release type, pressure-sensitive type, heat-sensitive type, chemically-reactive type, and epoxy, and the wherein second non-metal layer is a single layer of impregnated graphite  
15 fabric.

21. The composite plate as claimed in claim 13, wherein the composite plate includes in sequence a composite layer, a metal layer, a first non-metal layer, and a second non-metal layer.

22. The composite plate as claimed in claim 21, wherein the  
20 composite layer is a net formed by means of mix-weaving metal filaments and non-metal fibers, the metal filaments and the non-metal fibers being selected from the group consisting of graphite, Kevlar fibers, and titanium

filaments, the first non-metal layer being an adhesive layer of one of solvent-release type, pressure-sensitive type, heat-sensitive type, chemically-reactive type, and epoxy, and the second non-metal layer being a single layer of impregnated graphite fabric.